### **UC Irvine**

## Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

#### **Title**

The Research Escape-Hunt: An Escape Room for Resident Education on Research Design and Evidence-Based Medicine

#### **Permalink**

https://escholarship.org/uc/item/09c6j20r

#### Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 23(4.1)

#### **ISSN**

1936-900X

#### **Authors**

Fallon, Timothy Strout, Tania Anderson, Robert et al.

#### **Publication Date**

2022

#### **Copyright Information**

Copyright 2022 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

the didactic sessions highest marks for quality, and 98% (N=59) of participants felt that Night School was a valuable addition to their night shifts. Our pilot suggests there is a need and appreciation for structured, educational experiences among residents on night shift and that Night School merits continued curricular development.

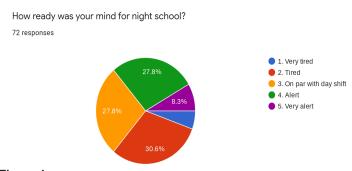


Figure 1.

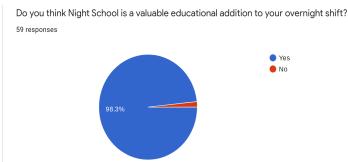


Figure 2.

# The Research Escape-Hunt: An Escape Room for Resident Education on Research Design and Evidence-Based Medicine

Timothy Fallon, Tania Strout, Robert Anderson, Carl German

Learning Objectives: We sought to develop a research escape-hunt to teach EM residents: 1) predictive statistics and diagnostic test characteristics, 2) interpretation of data and statistical analysis, 3) study design, 4) informed consent for research, and 8) the ethical principles guiding research.

**Introduction:** Research and evidence-based medicine are important parts of residency training and the ACGME identifies scholarly activity as a core requirement for EM. EM training programs take a variety of approaches to addressing these requirements and there is not a standard, widely accepted curriculum available.

**Curricular Design:** We considered ways to incorporate active, participatory learning experiences that effectively engage adult learners. Within the CORD community, escape-

hunts have demonstrated efficacy for other EM content. An escape-hunt was developed with each station focused on one topic and requiring participants to solve a series of puzzles. Prior to the event, participants reviewed materials covering the content including summary sheets and podcast links. The escape-hunt served as an opportunity to further explore and reinforce the asynchronous content. Faculty members were present to help guide teams through the stations and to answer questions about the content. Teams worked to solve each station with the first team to successfully complete all nine stations winning a prize. A subsequent COVID-impacted event was held the following year utilizing Zoom breakout rooms, demonstrating that this innovation can be successfully implemented both in-person and virtually.

Impact: Participants reported high levels of satisfaction (100% (21/21)) and engagement (95% (20/21)) with the activity, increased comfort with the content (91% (19/21)), and demonstrated improvements in knowledge across content areas (91% (19/21)). Participants reported using skills relevant to clinical practice such as 'working as a team,' 'task switching,' 'task delegation,' 'brainstorming,' and 'solving complex problems together.' Challenges exist related to props cost and the time for development; however, we now have a materials bank that can be used in the future and we have successfully implemented a COVID-safe virtual event, demonstrating the adaptability of this format.



Image 1.

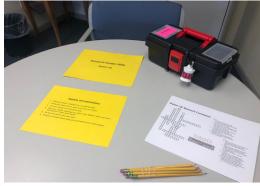


Figure 2.